Indoor Air Quality



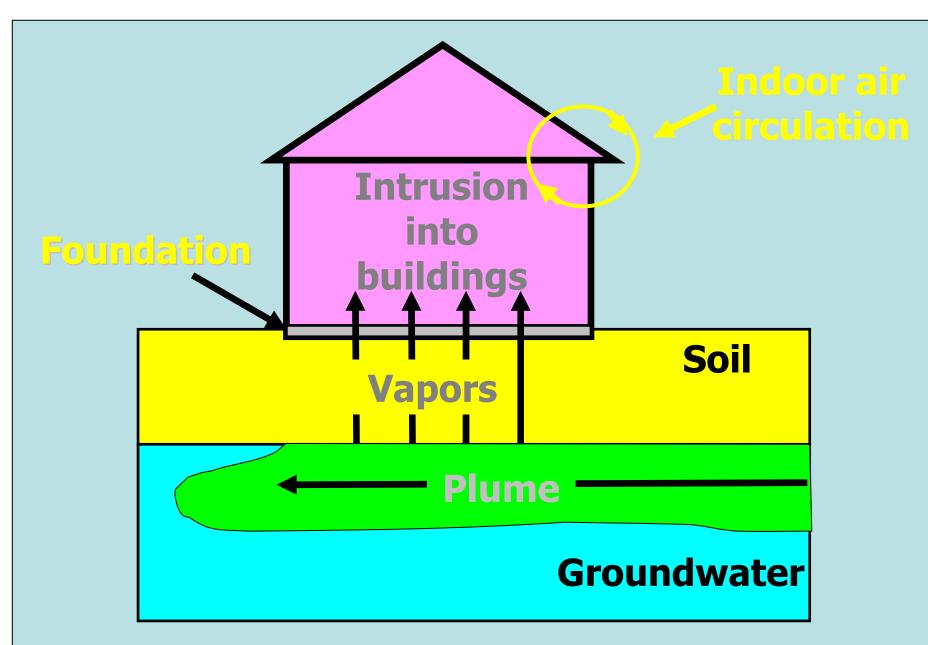
Indoor Air Results

In addition to TCE (the primary contaminant of concern related to the site), 12 other chemicals were detected, 4 of which exceed the California Human Health Screening Level (CHHSL) in at least one location.

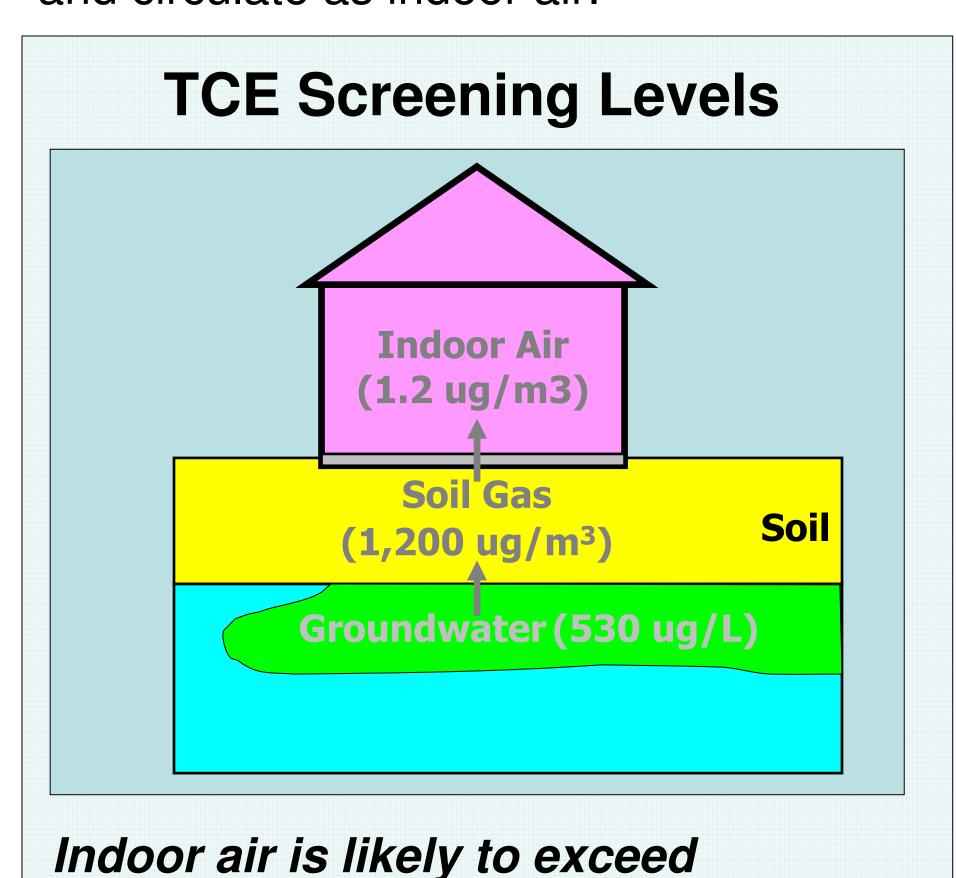
Chemical	CHHSL* (ug/m³)	Homes above CHHSL	Notes
TCE	1.22	5	2 additional homes with TCE in crawlspace
PCE	0.412	14	Not a Hookston chemical
1,2-DCA	0.116	8	Not a Hookston chemical
Vinyl Chloride	0.032	1	
Benzene	0.084	All houses tested	Not a COC** at Hookston Site Also found in ambient outdoor air

CHHSL = California Human Health Screening Level

Vapor Intrusion



- Volatile organic compounds in shallow groundwater vaporize and rise into unsaturated soil above the groundwater plume.
- Vapors may enter buildings through the foundation or crawl space.
- Vapors may migrate into habitable space and circulate as indoor air.

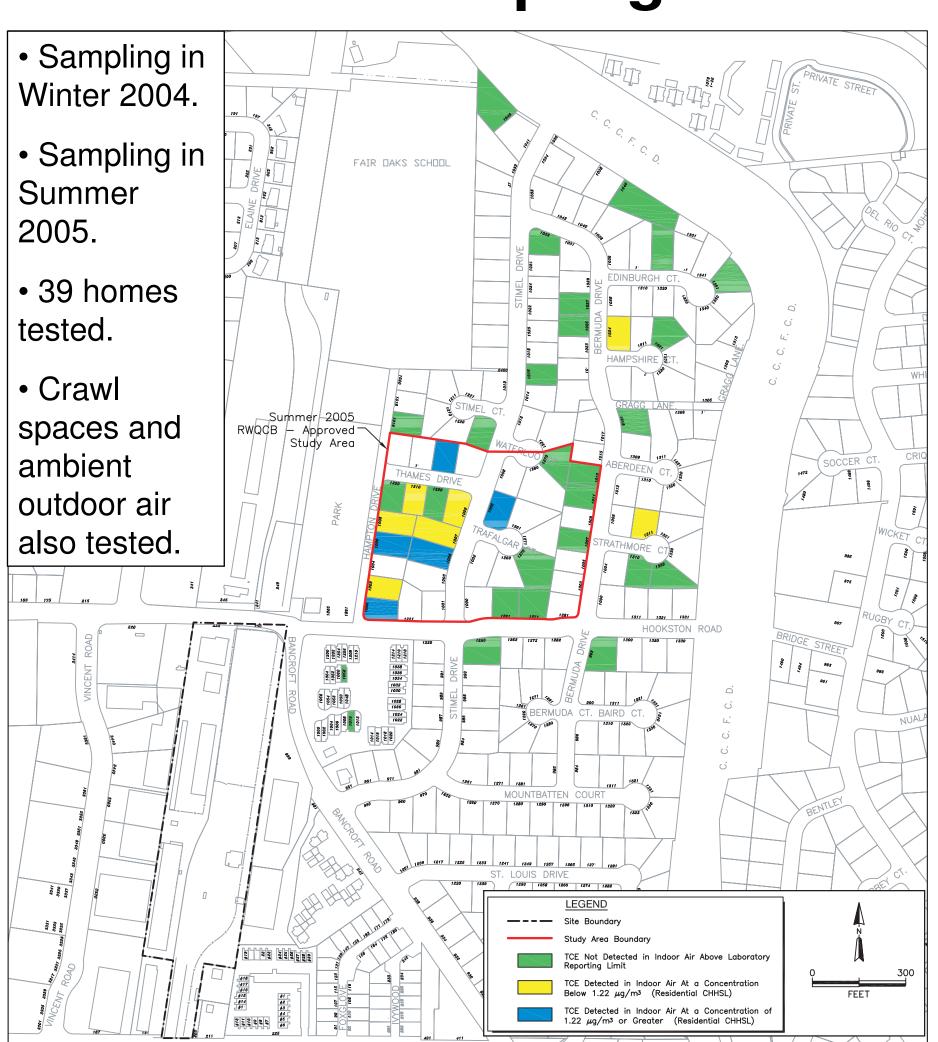


residential CHHSL if the concentration

of TCE in groundwater under the

building is 530 ug/L or greater.

Indoor Air Sampling to Date

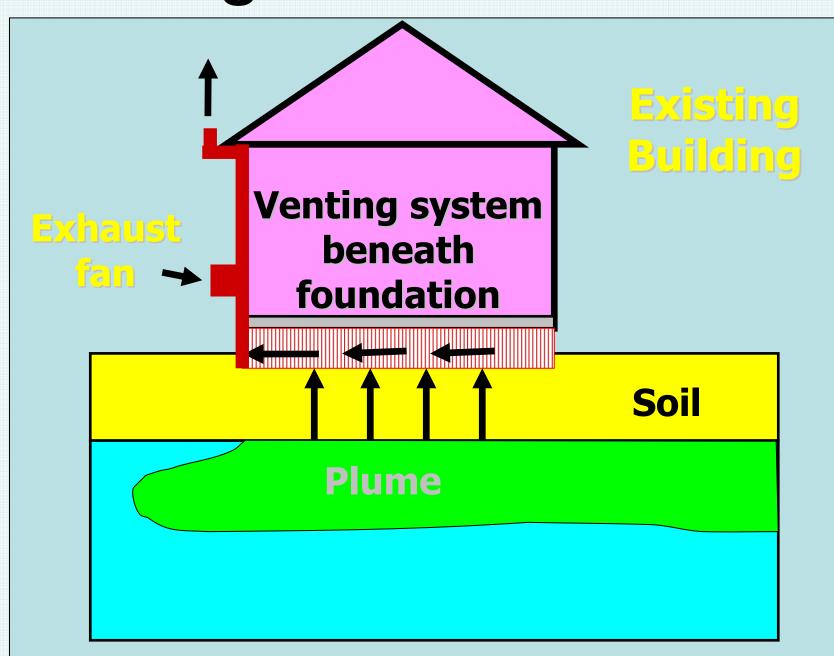


Summer 2005 Sampling

- Covered broader areas and included many more samples than Winter 2004 program.
- Included "non-Hookston" chemicals.
- Results show **no significant seasonal variations**.
- Extent of TCE detections in indoor air confined to a small area above the commingled plume axis (the block bounded by Hampton Dr., Thames Dr., Stimel Dr., and Hookston Rd.)



Crawl Space Vapor Removal Systems appear effective at reducing indoor TCE



- Vapor removal systems vent vapors from soil gas and crawl spaces to outside the building.
- Offered to all residents in the neighborhood with TCE > 1.3 ug/m³ (residential CHHSL).
- Installed in 3 homes following Winter 2004 sampling.
- Samples during Summer 2005 contained TCE below CHHSL.

California Human Health Screening Levels (CHHSL)

- Theoretical excess lifetime cancer risk of 1-in-1million using standard exposure assumptions and published toxicity values.
- Presence of a chemical at concentrations greater than CHHSL does not indicate that adverse impacts to human health are occurring or will occur.
- Chemical concentrations greater than CHHSL suggests that further evaluation of potential human health concerns is warranted.